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SEQUENCE LISTING

<110> Humphreys, David P
Heywood, Sam P

<120> Modified antibody fab fragments

<130> 07-1049-WO-US

<140> US 10/562,746
<141> 2006-06-16

<150> PCT/GB04/002810
<151> 2004-07-01

<150> GB 0319588.0
<151> 2003-08-20

<150> GB 0315457.2
<151> 2003-07-01

<160> 9

<170> PatentIn version 3.5

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Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
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Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Lys Val Glu Pro Lys Ser Cys
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Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
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Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 20 25 30

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 35 40 45

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 50 55 60

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 65 70 75 80

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 85 90 95

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
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Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala Ala
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Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr Phe
 20 25 30

Pro Glu Pro Val Thr Val Thr Trp Asn Ser Gly Ser Leu Ser Ser Gly
 35 40 45

Val His Thr Phe Pro Ala Val Leu Gln Ser Asp Leu Tyr Thr Leu Ser
 50 55 60

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Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val Thr
65 70 75 80

Cys Asn Val Ala His Pro Ala Ser Ser Thr Lys Val Asp Lys Lys Ile
85 90 95

Val Pro Arg Asp Cys
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<400> 4

Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln Leu
1 5 10 15

Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu Asn Asn Phe Tyr Pro
20 25 30

Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly Ser Glu Arg Gln Asn
35 40 45

Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser Lys Asp Ser Thr Tyr
50 55 60

Ser Met Ser Ser Thr Leu Thr Leu Thr Lys Asp Glu Tyr Glu Arg His
65 70 75 80

Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr Ser Pro Ile
85 90 95

Val Lys Ser Phe Asn Arg Gly Glu Cys
100 105

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ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 120

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|---|-----|
| tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca | 180 |
| ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcagcttggg caccagacc | 240 |
| tacatctgca acgtgaatca caagcccagc aacaccaagg tcgacaagaa agttgagccc | 300 |
| aaatcttggt aa | 312 |

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| tctggaactg cctctgttgt gtgcctgctg aataacttct atcccagaga ggccaaagta | 120 |
| cagtggaagg tggataacgc cctccaatcg ggtaactccc aggagagtgt cacagagcag | 180 |
| gacagcaagg acagcaccta cagcctcagc agcaccctga cgctgagcaa agcagactac | 240 |
| gagaaacaca aagtctacgc ctgcgaagtc acccatcagg gcctgagctc accagtaaca | 300 |
| aaaagtttta atagagggga gtgttaa | 327 |

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| atggtgaccc tgggatgcct ggtcaagggc tatttccctg agccagtga agtgacctgg | 120 |
| aactctggat ccctgtccag cgggtgtgac accttcccg ctgtcctgca atctgacctc | 180 |
| tacactctga gcagctcagt gactgtcccc tccagcacct ggcccagcga gaccgtcacc | 240 |
| tgcaacgttg cccaccggc cagcagcacc aagggtggaca agaaaattgt gccagggat | 300 |
| tggttaa | 306 |

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| gcctcagtcg tgtgcttctt gaacaacttc taccctaaag acatcaatgt caagtggaag | 120 |
| attgatggca gtgaacgaca aaatggcgtc ctgaacagtt ggactgatca ggacagcaaa | 180 |
| gacagcacct acagcatgag cagcaccctc acgttgacca aggacgagta tgaacgacat | 240 |
| aacagctata cctgtgaggc cactcacaag acatcaactt caccattgt caaaagcttt | 300 |
| aatagagggg agtggttaa | 318 |

<210> 9
 <211> 111
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<220>
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<400> 9

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe | Pro | Leu | Ala | Pro | Ser | Ser | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala | Leu | Gly | Cys | Leu | Val | Lys | Asp | Tyr |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp | Asn | Ser | Gly | Ala | Leu | Thr | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu | Gln | Ser | Ser | Gly | Leu | Tyr | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser | Ser | Ser | Leu | Gly | Thr | Gln | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Ile | Cys | Asn | Val | Asn | His | Lys | Pro | Ser | Asn | Thr | Lys | Val | Asp | Lys |
| | | | 85 | | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Val | Glu | Pro | Lys | Ser | Cys | Asp | Lys | Thr | His | Thr | Cys | Ala | Ala |
| | | | 100 | | | | | 105 | | | | | 110 | |